

OM protein - protein search, using sw model  
Run on: April 26, 2003, 13:02:01 ; Search time 23 seconds  
(Without alignments) 2902.092 Million cell updates/sec

Title: US-10-027-000-2  
Perfect score: 4391  
Sequence: I MADIVEAAILKKLTLAEKVD.....DGVALRGKFTVGETYWNMSGV 833

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 301932 seqs, 80129803 residues

Total number of hits satisfying chosen parameters: 301932

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Published\_Applications\_AA:  
1: /cgn2\_6/ptodata/1/pubbaa/us08\_NEW\_PUB.pep: \*  
2: /cgn2\_6/ptodata/1/pubbaa/PCT\_NEW\_PUB.pep: \*  
3: /cgn2\_6/ptodata/1/pubbaa/us06\_NEW\_PUB.pep: \*  
4: /cgn2\_6/ptodata/1/pubbaa/us07\_NEW\_PUB.pep: \*  
5: /cgn2\_6/ptodata/1/pubbaa/us07\_PUBCOMB.pep: \*  
6: /cgn2\_6/ptodata/1/pubbaa/us07\_PUBCOMB.pep: \*  
7: /cgn2\_6/ptodata/1/pubbaa/PCNTUS\_PUBCOMB.pep: \*  
8: /cgn2\_6/ptodata/1/pubbaa/US08\_PUBCOMB.pep: \*  
9: /cgn2\_6/ptodata/1/pubbaa/us09\_NEW\_PUBCOMB.pep: \*  
10: /cgn2\_6/ptodata/1/pubbaa/us09\_PUBCOMB.pep: \*  
11: /cgn2\_6/ptodata/1/pubbaa/us10\_NEW\_PUB.pep: \*  
12: /cgn2\_6/ptodata/1/pubbaa/us10\_PUBCOMB.pep: \*  
13: /cgn2\_6/ptodata/1/pubbaa/us60\_NEW\_PUB.pep: \*  
14: /cgn2\_6/ptodata/1/pubbaa/us60\_PUBCOMB.pep: \*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	953	21.7	721	9 US-10-121-032-19 Sequence 19, Appl
2	951.5	21.7	3782	9 US-09-860-4 Sequence 4, Appl
3	951.5	21.7	3782	9 US-09-988-384B-4 Sequence 4, Appl
4	951.5	21.7	3782	10 US-09-861-289-4 Sequence 24, Appl
5	949.5	21.5	809	9 US-09-860-64-24 Sequence 24, Appl
6	944.5	21.5	809	9 US-09-988-384B-24 Sequence 24, Appl
7	944.5	21.5	809	10 US-09-861-289-24 Sequence 34, Appl
8	165	3.8	171	9 US-09-734-569-34 Sequence 385, Appl
9	151.5	3.5	548	9 US-09-738-626-3855 Sequence 9, Appl
10	128	2.9	1434	9 US-10-080-05-9 Sequence 6644, Appl
11	126.5	2.9	1434	9 US-10-080-05-9 Sequence 383, Appl
12	121.5	2.8	2609	9 US-10-043-487-383 Sequence 33, Appl
13	121	2.8	2353	10 US-09-97-662-33 Sequence 6, Appl
14	118.5	2.7	599	9 US-09-869-97-6 Sequence 6, Appl
15	118.5	2.7	599	10 US-09-732-350-6 Sequence 2, Appl
16	115	2.6	1938	9 US-10-014-436-2 Sequence 3, Appl
17	113.5	2.6	833	9 US-10-014-436-3 Sequence 13, Appl
18	113.5	2.6	1435	9 US-10-080-505-13 Sequence 4903, Ap
19	113	2.6	1300	10 US-09-815-242-10906 Sequence 10906, A

Sequence 310, App  
Sequence 2, Appl  
Sequence 2, Appl  
Sequence 7, Appl  
Sequence 7, Appl  
Sequence 38, Appl  
Sequence 4, Appl  
Sequence 19, Appl  
Sequence 17, Appl  
Sequence 7, Appl  
Sequence 1197, A  
Sequence 5, Appl  
Sequence 6, Appl  
Sequence 29, Appl  
Sequence 45, Appl  
Sequence 10438, A  
Sequence 2, Appl  
Sequence 2, Appl  
Sequence 10, Appl  
Sequence 3548, AP  
Sequence 12048, A  
Sequence 2, Appl  
Sequence 8, Appl  
Sequence 579, Ap  
Sequence 38, Appl  
Sequence 2, Appl

RESULT 1  
US-10-121-032-19  
; Sequence 19, Application US/10121032  
; Patent No. US2002015550A1  
; GENERAL INFORMATION:  
; APPLICANT: Bylina, Edward J.  
; TITLE OF INVENTION: GLYCOSIDASE ENZYMES  
; NUMBER OF SEQUENCES: 72  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Gray Cary Ware & Freidenrich LLP  
; STREET: 4365 Executive Drive, Suite 1600  
; CITY: San Diego  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 92121  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: Windows 95  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/121,032  
; FILING DATE: 09-Apr-2002  
; CLASSIFICATION: <Unknown>  
; PRIORITY APPLICATION DATA:  
; APPLICATION NUMBER: US/09/134,078  
; FILING DATE: 13-AUG-1998  
; APPLICATION NUMBER: 08/949,026  
; FILING DATE: 10-OCT-1997  
; APPLICATION NUMBER: 60/056,916  
; FILING DATE: 06-DEC-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Haile, Lisa A.  
; REGISTRATION NUMBER: 38-347  
; REFERENCE/DOCKET NUMBER: 09010/024002  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 858/677-1456  
; TELEFAX: 858/677-1465  
; INFORMATION FOR SEQ ID NO: 19:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 721 amino acids  
; TYPE: amino acid

Sequence 10906, A  
Sequence 310, App  
Sequence 2, Appl  
Sequence 2, Appl  
Sequence 7, Appl  
Sequence 7, Appl  
Sequence 38, Appl  
Sequence 4, Appl  
Sequence 19, Appl  
Sequence 17, Appl  
Sequence 7, Appl  
Sequence 1197, A  
Sequence 5, Appl  
Sequence 6, Appl  
Sequence 29, Appl  
Sequence 45, Appl  
Sequence 10438, A  
Sequence 2, Appl  
Sequence 2, Appl  
Sequence 10, Appl  
Sequence 3548, AP  
Sequence 12048, A  
Sequence 2, Appl  
Sequence 8, Appl  
Sequence 579, Ap  
Sequence 38, Appl  
Sequence 2, Appl



QY 691 ADDKVNPFHGHLISYTTFAFSNLSVSH-KDGKLSSLSVKNTGSVPGQAQVLYVKPLOA 749  
   ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| : ||| :  
 Db 1762 ENVKPLFFPGHGSISYTSFTQSAPTFRTVRTSTGKLVTVTNRSGKRAQETVQYLGASP 1821  
 QY 750 AKINRPPVKEKGAKVELQPGTKAVVIEEKK-----YVAYFDE 790  
 Db 1822 VTAPQAKKKLVGTYKVSLAAGERAKTVVNDRQLQTGSSSADLRGSATVNVWMSRAET 1881  
 QY 791 ERDQMCVERGKDYEVIVSSAAKDGVALRGKTVG 825  
 Db 1882 PRVPFLDKAYEELRAETDAATARVLDGSRYLIG 1916

RESULT 3  
 US-09-988-384B-4  
 ; Sequence 4, Application US/09998384B  
 ; GENERAL INFORMATION:  
 ; Publication No. US20030073824A1  
 ; APPLICANT: Sherman, D.H.  
 ; APPLICANT: Liu, H.  
 ; APPLICANT: Xue, Y.  
 ; APPLICANT: Zhao, L.  
 ; TITLE OF INVENTION: DNA encoding methymycin and pikromycin  
 ; FILE REFERENCE: 600\_536US1  
 ; CURRENT APPLICATION NUMBER: US/09/988,384B  
 ; CURRENT FILING DATE: 2001-11-19  
 ; PRIOR APPLICATION NUMBER: PCT/US99/14398  
 ; PRIOR FILING DATE: 1999-06-25  
 ; PRIOR APPLICATION NUMBER: US 09/1105,537  
 ; PRIOR FILING DATE: 1998-06-26  
 ; NUMBER OF SEQ ID NOS: 53  
 ; SEQ ID NO 4  
 ; LENGTH: 3782  
 ; TYPE: PRT  
 ; ORGANISM: Streptomyces venezuelae  
 US-09-988-384B-4

Query Match 21.7%; Score 951.5; DB 9; Length 3782;  
 Best Local Similarity 31.4%; Pred. No. 7.3e-68; Mismatches 340; Indels 137; Gaps 25;  
 Matches 275; Conservative 123; MisMatches 340; Del 137; Gap 25;

QY 9 ILLKLTIAEKVVLLAGIDFW-----HTKALPKHGVPSLRFDTGPNGVRGKTFENG 58  
 Db 1121 LVQAQMTLDEKISFV---HWALDPDRQNVYLPGVPRGLGPIELRADGPNGIR---LVG 1172  
 QY 59 VRPACFCGCGTSGSTENOTLLEAGRNMGRKAIKSAHVILGPTINMQRSPLGRRGFEI 118  
 Db 1173 OTATALPAPVALASTFDTMADSYKVMGRGALNQDMVGLPMNNIRVPHGRNYTF 1232  
 QY 119 GEDPFPLAGLAALRGIQSTGQVATIKHFLCNDQDRRMVQSVTERALREYALPQ 178  
 Db 1223 SEPLVRSRTAQVQIKQIGAGLMTFAKHFAANNOQNRRNSVANDEQTLREFPAE 1292  
 QY 179 IAVRDSDGKA-FMTAYNGINGVSCSENPKVLDGMURKGWDGLIMSIVWYGYSTEAV 236  
 Db 1293 AS--SKAGAASEMCAYNGLNGKPSGNDLNLNVNVRQFOGWMNSDWLAT-PGTDAI 1348  
 QY 237 VAGLDEM-----RPP-RERGETIKFVNNSNGK-PFIHVIDORAREVYLOFVK 232  
 Db 1349 TKGIDQEMGVELPGDVPKGEPEPPPAKEFGEEKAKTAVLNGVPEAATRSAERTWQMEKT 1408

RESULT 4  
 US-09-861-289-4  
 ; Sequence 4, Application US/09861289  
 ; Patent No. US20020110897A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Sherman, D.H.  
 ; APPLICANT: Liu, H.  
 ; APPLICANT: Xue, Y.  
 ; APPLICANT: Zhao, L.  
 ; TITLE OF INVENTION: DNA encoding methymycin and pikromycin  
 ; FILE REFERENCE: 600\_438US1  
 ; CURRENT APPLICATION NUMBER: US/09/861,289  
 ; CURRENT FILING DATE: 2001-05-18  
 ; PRIOR APPLICATION NUMBER: 09/105,537  
 ; PRIOR FILING DATE: 1998-06-26  
 ; NUMBER OF SEQ ID NOS: 43  
 ; SOFTWARE: FastSEQ for Windows Version 3.0  
 ; SEQ ID NO 4  
 ; LENGTH: 3782  
 ; TYPE: PRT  
 ; ORGANISM: Streptomyces venezuelae  
 US-09-861-289-4

Query Match 21.7%; Score 951.5; DB 10; Length 3782;  
 Best Local Similarity 31.4%; Pred. No. 7.3e-68; Mismatches 340; Indels 137; Gaps 25;  
 Matches 275; Conservative 123; MisMatches 340; Del 137; Gap 25;

QY 9 ILLKLTIAEKVVLLAGIDFW-----HTKALPKHGVPSLRFDTGPNGVRGKTFENG 58  
 Db 1121 LVQAQMTLDEKISFV---HWALDPDRQNVYLPGVPRGLGPIELRADGPNGIR---LVG 1172  
 QY 59 VRPACFCGCGTSGSTENOTLLEAGRNMGRKAIKSAHVILGPTINMQRSPLGRRGFEI 118  
 Db 1173 OTATALPAPVALASTFDTMADSYKVMGRGALNQDMVGLPMNNIRVPHGRNYTF 1232  
 QY 119 GEDPFPLAGLAALRGIQSTGQVATIKHFLCNDQDRRMVQSVTERALREYALPQ 178  
 Db 1223 SEPLVRSRTAQVQIKQIGAGLMTFAKHFAANNOQNRRNSVANDEQTLREFPAE 1292  
 QY 179 IAVRDSDGKA-FMTAYNGINGVSCSENPKVLDGMURKGWDGLIMSIVWYGYSTEAV 236  
 Db 1293 AS--SKAGAASEMCAYNGLNGKPSGNDLNLNVNVRQFOGWMNSDWLAT-PGTDAI 1348  
 QY 237 VAGLDEM-----RPP-RERGETIKFVNNSNGK-PFIHVIDORAREVYLOFVK 282





RESULT 9  
 US-09-738-626-3855  
 ; Sequence 3855, Application US/09738626  
 ; Publication No. US20020197605A1

RESULT 9  
 US-09-738-626-3855  
 ; Sequence 3855, Application US/09738626  
 ; Publication No. US20020197605A1

RESULT 8  
 US-09-734-569-34  
 Sequence 34, Application US/09734569  
 ; Patent No. US20020054816A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Letchi, Jens  
 ; APPLICANT: Renz, Andreas  
 ; APPLICANT: Elhardt, Thomas  
 ; APPLICANT: Reindl, Andreas  
 ; APPLICANT: Bischhoff, Friedrich  
 ; APPLICANT: Freud, Markus  
 ; APPLICANT: Annette  
 ; APPLICANT: Duvvenig, Elke  
 ; APPLICANT: Schmidt, Ralf-Michael  
 ; APPLICANT: Reski, Ralf  
 TITLE OF INVENTION: Moss genes from Physcomitrella patens encoding proteins involved in the synthesis of carbohydrates  
 TITLE OF INVENTION: In the synthesis of carbohydrates  
 FILE REFERENCE: BAFB-NAR-133-99-US  
 CURRENT APPLICATION NUMBER: US/09/734\_569  
 CURRENT FILING DATE: 2001-05-24  
 PRIORITY APPLICATION NUMBER: US 60/171, 101  
 PRIORITY FILING DATE: 1999-12-16  
 NUMBER OF SEQ ID NOS: 181  
 SOFTWARE: PatentIn Ver. 2.1/Wordperfect 6.1  
 SEQ ID NO 34  
 LENGTH: 171  
 TYPE: PR  
 ORGANISM: Physcomitrella patens  
 US-09-734-569-34

Query Match 3.8%; Score 165; DB 10; Length 171;  
 Best Local Similarity 29.6%; Pred. No. 8.7e-06;  
 Matches 56; Conservative 30; Mismatches 65; Indels 38; Gaps 8;

QY 522 TTKGTTIL--GGIR---QIGRNSEVVYKOPNPNSAGYAKCGKGFFAAIVVIGEOPQVAEVN 54  
 Db 2 TTKGTTIL--GGIR---QIGRNSEVVYKOPNPNSAGYAKCGKGFFAAIVVIGEOPQVAEVN 54

QY 576 GADRSNKLPGVLQLTADWAAANPNTVWMQGTPEEM--PWLDATPAVIAWYGGNETG 634  
 Db 55 GDNLNNLNMPAPYPAKID--TCSNVACVVMISGRPLVPEPYLGYNNAFWAWLPGSE-G 112

QY 635 NSIADWVFGDYNPSGKLSLSPFVKRLQDNPAPFLNFRTEAAGRFLYIGEDVYV3RYYETADK 694  
 Db 113 RGVAEVLFGEVNFSGRLSRWFRVVDQLP-----MNVDTRY----N 150

QY 695 VNPFEGHL 703  
 Db 151 PLFPFGGM 159

RESULT 10  
 US-10-080-505-9  
 Sequence 9, Application US/10080505  
 ; Publication No. US20030073166A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: St. Geme, Joseph W.  
 ; TITLE OF INVENTION: HAMOPHILUS ADHERENCE AND PENETRATION PROTEINS  
 ; FILE REFERENCE: A-59491-1/RFT/DCG/DHR  
 ; CURRENT APPLICATION NUMBER: US/10/080\_505  
 CURRENT FILING DATE: 2002-02-22  
 PRIORITY APPLICATION NUMBER: US 08/296, 791  
 PRIORITY FILING DATE: 1994-10-25  
 PRIORITY APPLICATION NUMBER: US 09/839, 996  
 PRIORITY FILING DATE: 2001-04-20  
 NUMBER OF SEQ ID NOS: 58

QY 641 VPGDYNNSGKLSLSPKRRQDNPFLNFRTEAG 690  
 Db 644 LYGDVNIPSGKLLQSF-----PAENQHAVAQDPYSPYGVQDNPQTYREGITVGYRFDK 696  
 QY 691 ADKVNVPPFGHGLSYTFAFSNSLVSH-KDGKLSVSLSVKNITGSVPQAQVQAOVLYVKPLQA 749  
 Db 697 ENVKPLPFGHGLSYTSFTQSAPTWKSTTGGIKVTVVRNSCKRAGQEVWQAYLGASP 756  
 QY 750 AKINRPYKELKGPFAKVELQPGKAVTIEEQKYVAAYFDEERDQMCVEKGDYEVIVSD 809  
 Db 757 VTAPQAKKLVGTYKVSLAGAEKTVTNV-----D-RRQLOQTS 795

QY 810 SAAKDGVALRGKFTV 824  
 Db 796 SSAD----LRGSATV 806

RESULT 8  
 US-09-734-569-34  
 Sequence 34, Application US/09734569  
 ; Patent No. US20020054816A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Letchi, Jens  
 ; APPLICANT: Renz, Andreas  
 ; APPLICANT: Elhardt, Thomas  
 ; APPLICANT: Reindl, Andreas  
 ; APPLICANT: Bischhoff, Friedrich  
 ; APPLICANT: Freud, Markus  
 ; APPLICANT: Annette  
 ; APPLICANT: Duvvenig, Elke  
 ; APPLICANT: Schmidt, Ralf-Michael  
 ; APPLICANT: Reski, Ralf  
 TITLE OF INVENTION: Moss genes from Physcomitrella patens encoding proteins involved in the synthesis of carbohydrates  
 TITLE OF INVENTION: In the synthesis of carbohydrates  
 FILE REFERENCE: BAFB-NAR-133-99-US  
 CURRENT APPLICATION NUMBER: JP 00/159162  
 CURRENT FILING DATE: 2000-12-18  
 PRIORITY APPLICATION NUMBER: JP 99/377484  
 PRIORITY FILING DATE: 1999-12-16  
 PRIORITY APPLICATION NUMBER: JP 00/159162  
 PRIORITY FILING DATE: 2000-04-07  
 PRIORITY APPLICATION NUMBER: JP 00/280988  
 PRIORITY FILING DATE: 2000-08-03  
 NUMBER OF SEQ ID NOS: 7059  
 SOFTWARE: PatentIn ver. 3.0  
 SEQ ID NO 385  
 LENGTH: 548  
 TYPE: PR  
 ORGANISM: Corynebacterium glutamicum  
 US-09-738-626-3855

Query Match 3.5%; Score 151.5; DB 9; Length 548;  
 Best Local Similarity 23.2%; Pred. No. 0.00064; Mismatches 132; Indels 55; Gaps 11; Matches 71; Conservative 48; Mismatches 132; Indels 55; Gaps 11;

QY 64 FPGTSIGSTFNOTLLEPAGKMKAKTAKSAHVIGLPTTINQRSPILLGGRGFESIDDPF 123  
 Db 188 WFGELGLAALRDAELMFTGTEAKENRAGGVHKLGYMDALASEPWRMSRNGCTFEDPE 247  
 QY 124 EAGLGAALRIOI0---STGVOATKHF---LCNDQEDRM---MVQSVTERARE 171  
 Db 248 LISDYIAAVRGLQGPPELSKNSVSTTIKHFPGGVVRLDGHDPFHFMHQQTNEYPTEDALGK 307  
 QY 172 IVALPFIAVRSQGPAGFTAY---NGIN-----GVSCSENPKLDGM 211  
 Db 308 YHLPFFOAI-DAGCASIIMPYYARPMNSANQDQDQWLQNPTQFEEVAFANRTHFDL 366  
 QY 212 LRKEWMGDLIMSDWYGTYSTEAVVAGLDIEMPGPFRP---RGTELKFNVSNSKPFI 266  
 Db 367 LRDAMGIRGYWNSD---SGVIDAMMWGVE-ELSE-BRFAAVRAQTDIFSDMANRRL 421

QY 267 HV-----DORARETQFVEKAASGVTN---GPETVNNPTETALLRKYGN 314  
 Db 422 EVAEAGHDLSELNQPVQRLIEFOQGLFENPYVSEDAEKIIGAPEVSAALGNKAOLDS 481  
 QY 315 IVLKN 320  
 Db 482 VILRN 487

SOFTWARE: PatentIn version 3.1  
SEQ ID NO: 9  
LENGTH: 1434  
TYPE: PRT  
ORGANISM: Haemophilus influenzae  
FEATURE: misc. feature  
NAME/KEY: misc. feature  
LOCATION: (568)..(568)  
OTHER INFORMATION: The 'xaa' at location 568 stands for Ser, Gly, or Cys.  
NAME/KEY: misc. feature  
LOCATION: (1702)..(1702)  
OTHER INFORMATION: "n" at position 1702 can be any base.  
; US-10-080-505-9

Query Match 2.9%; Score 128; DB 9; Length 1434;  
Best Local Similarity 20.1%; Pred. No. 0.22; Mismatches 243; Indels 180; Gaps 27;  
Matches 125; Conservative 75; Mismatches 243; Indels 180; Gaps 27;

QY 261 NGKPFTHVTPDORAREVLFQFVKKCAASGVTEGPEPTE--VNNTPTAAALLRK----- 309  
| : | ; : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
Db 476 SGRGTQVLNDDDKQFDKTFGFRGRDLINGHSITFKRIONTDGAMIVNHNTQVANI 535

OY 310 - - VGNBGIIVLKKENNVNLPLSKKK----- TLIQGPNAKATYHGG 348  
| | | | | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
Db 536 TTGNEISITAPSNKNNNKLKY SKETAYNGWFFXETDKNKHNGRNLLIKPTTEDRLLIS 595

QY 349 GSAAALRAYAVTPFDGLSKQLETPSYTIVGAYTVPPILGEQCLTPDGAPGMMRMVNEP 408  
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
Db 596 GTGNLKGDIQTGKLFSSGRPTPHAY----- NHLDKRW--SEM 632

OY 409 PGTP-----NRQHIDELFFTKTDMHLNDYTHPKADTWYADMECTYADED-- 454  
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
Db 633 ECPQGEIIVMDYDWINTRFKAEFNQKGGSAVWSR-----VSSISBGNTVSNANA 684

OY 455 -----CTYE--LGIVUCGTAKAYVDQLVUDNATKQVPGDAFFGATRETEGR 500  
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
Db 685 TPGWVPMQNOTICTRSWDTGLETCKTN- LDKKVIDS---ITTOQINSINLDNAT 738

QY 501 IML-----VKGNTYKEKIEGSAPIYTLKDITVPGHGSRLRVGGCKVTD----- 545  
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
Db 739 VNINGLAKLNGHNLINHSQFTLSNNATQIGNIKLUSNHNARVNATLMGDVNLAITSRF 798

OY 546 ---QAEIEKSYALAKEHDHQVIIACAGLNADMETEGADRASHMKTLPGEVLDQIJDADVAANPN 601  
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
Db 799 TSNQATOIGTISLHOQAQTVDNANLNGNYHTLDSARFSLKNSHFSHQ1QGD----KD 853

RESULT 12  
US-10-043 487-383  
; Sequence 383; Application US/10043487  
; Publication No. US200305520A1  
; General Information:  
; GENERAL INFORMATION:  
; APPLICANT: HYBRIDENTICS  
; APPLICANT: Pierre, LEGRAIN  
; TITLE OF INVENTION: Protein-protein interactions between Shigella flexneri polypeptides  
; FILE REFERENCE: B477A  
; CURRENT APPLICATION NUMBER: US/A/043,487  
; CURRENT FILING DATE: 2002-04-30  
; PRIOR APPLICATION NUMBER: US 60/261,130  
; PRIOR FILING DATE: 2001-01-12  
; NUMBER OF SEQ ID NOS: 561  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO: 383  
; LENGTH: 2609  
; TYPE: PRT  
; ORGANISM: Shigella flexneri  
; US-10-043-487-383

Query Match 2.8%; Score 121.5; DB 9; Length 2609;  
Best Local Similarity 18.5%; Pred. No. 1.9; Mismatches 345; Indels 379; Gaps 47;  
Matches 191; Conservative 120; Mismatches 345; Indels 379; Gaps 47;

QY 35 KHGVPSLR-TDGPNGY-----RGKFFENGPACFCPCGTSIGSTENQTLLEEAG 83  
| : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |  
Db 1439 KAGVAPLOVKVYOGPKLVEPVDPVNPADGQTQVNTVPSRGPYSV----- 1485

QY 84 KMMCKEATAKSA-HVILGPTINNMRSPPLGGRCFESIGEDPFLAGLAALIRGIQSNGVQ 142 ; Patent No. US20020102276A1  
Db 1486 -LVGDEEVPRSPKPKVLPHTDASKWASG-----; GENERAL INFORMATION:  
Db 1524 ASLPUVEFTIDAKDAGEGLAV---QITDPEGSKPKKTHIQDNHDGTYTVA-----; APPLICANT: PEAR, IAN RICHARD ANSELM  
QY 143 ATIKHFLCNDQEDRMMYQSTIVERALEREIYALPFOIAVRDSSOPGAFTAYNGINVSCS 202 ; APPLICANT: JENNINGS, MICHAEL PAUL  
Db 1571 -----; TITLE OF INVENTION: NOVEL SURFACE ANTIGEN  
QY 203 ENPKYLDGMRLKREWGWGWDGLIMDWGYGYSTTAWAGLDLENP-GPRER---GTLKF 257 ; FILE REFERENCE: 065064/0134  
Db 1608 TVTVSIGGHGLAGAGIGPTIQEE--TVITDVTKAAGKGKVCTVCTPQSEVDVWE 1570 ; CURRENT APPLICATION NUMBER: US09/777,862  
QY 299 NTETTAALLRKVNEG--IVLKNENNVLPLSKKKYLIVGPN-----; PRIORITY FILING DATE: 2001-05-03  
Db 1665 NEDGTFDFYTAQPQPKVVICRFGGEHVNPSPFQVTPALAGDQPSVQPLRSQQLAPQT 1724 ; PRIORITY APPLICATION NUMBER: GB 9726398.2  
QY 345 YHGGS-----; PRIORITY FILING DATE: 1997-12-12  
Db 1725 YAOQQQOTWAPIRPLVQVNGDVTSLRFDLVLIP-; NUMBER OF SEQ ID NOS: 33  
QY 388 GOCCLTPDGAPCMRWRVENEPEPGTPNROHIDELFFKTDMHL-----; SOFTWARE: patentin Ver. 2.1  
Db 1783 TD---NKDGTVTVRY-----; SEQ ID NO: 33  
QY 433 -HPKAADTWADMEGTYTADBDCTY--LGIVWCGTAKAYV-----; LENGTH: 2353  
Db 1832 AYGP-GLTHGVVNVNPATPTVNTKDAEGGSLAIKPGSKAEISCTNDQGTCVSYLPVL 1890 ;  
QY 472 --DDQLVNDATKQVGDAFFGSAARETGRNLVK-GNTYKFKEFQSAPTYLKDTI 528 ;  
Db 1891 PDYSILVVKYHQHVGSPFTRAVTGDDSMHMISHIKVGSADDIPINI-SBTDSLTLAV 1949 ;  
QY 529 VFGHG-----; ORGANISM: Haemophilus influenzae  
Db 1950 VPSPGRRREPCLKLRLANGHVGISFPKEIGEHLYHVVKNGQH-----; US-09-797-862-33  
QY 581 SNKLPGVLDQL-TADYAANANTVVNMQTTPEEMFWLDTAPAVIQAWYGG-----; 630  
Db 1994 SSPIPVVISQSEIGDASRVRVSGOHLHEGTFPEAFIDIR--DAGVGLSIEGPS 2050  
QY 631 -----; Score 121; DB 10; Length 2353;  
Db 2051 KVINTNEDLEDGTCRTYCPTEPGNYINTKFAODHVGSSPFSYKVTKBGRVKSITRR 2110 ; Best Local Similarity 20.8%; Pred. No. 1.8;  
QY 651 -----; Matches 138; Conservative 92; MisMatches 244; Indels 188; Gaps 35;  
Db 2111 RAPSVAVGSHCDLSKLIPEISIQDMAQTWSPSKTHAEIVEGENHHTCIREVPAEMG 2170 ;  
QY 681 --VYGYRITYEADKDVN--; DB 1762 ;  
Db 2171 THTVSKYKQHVPSPFQTYPIGEGGAKVRAAGPGLERAAGVFAFSWTREAGA 2230 ;  
Qy 712 -NLSVS-----; APPLICANT: MOXON, E. RICHARD  
Db 2231 GGAAIAVEGPKSAEISFEDRKDKGSCGVAVWQEQGDYEVSVKFNEEHIFDSPVWPVASP 2290 ;  
Qy 736 GAQVAKOLYVVKPLQA--KINRPVK--EUKGF---AKVELQPG--ETKAVTIEQEKY 783 ;  
Db 2291 SGDARRLTWVSSLQESGLKVNQSPASFAVSLNGAKAIDAKVHSAGALEBECCYVEIDDKY 2350 ;  
Qy 784 VAVYDEERQWCV 98 ;  
Db 2351 AVRIPRENGVYLID 2365 .

RESULT 13  
US-09-797-862-33

; Sequence 33, Application US/09797862

QY 190 MTAINGNSVCSCEPNPKYDGLMURKEWGWGDLIMSDWGYGYSTTEAVWAGLDLEMPPRR 249 ;  
Db 1707 VTBRNGDKKKFVUDASGLADALNKLW---; APPLICANT: PEAR, IAN RICHARD ANSELM  
QY 250 FR-GETLKINVSNCRKPFTIVDORAREVYQVFKVCAASG-----; APPLICANT: JENNINGS, MICHAEL PAUL  
Db 1763 FKADNLKIKQS GKDFYISLKKELDTSVERKDANGGTGSESTKIKDGLITPANGA 1821 ;  
QY 294 ETVNNTPTTAALR--KVGNBGIVILKENNENVLPSK--KKTIVGPAKOQATYHG 347 ;  
Db 1822 GAAGANTANTISYKDGISAGNAV----; FILE REFERENCE: 065064/0134  
QY 348 GGSALRALRAYAVAPFDGLSKOLETPPSVYTAGTVVPLIGOCJAPDAGPOMRMWV-FN 406 ;  
Db 1876 -----; CURRENT APPLICATION NUMBER: US09/777,862  
QY 407 EPCTPNQHQHIDLEFFKMDHMVHDYHPKAADTWADMEGTYTADBDCTYBGLWVCGT 466 ;  
Db 1917 KTGEPNQBYNAGV---; PRIORITY FILING DATE: 1997-12-12  
QY 467 AKAVW- DDDQLVNDATKQVGDAFFGSAATREETGRNLVK-----; LENGTH: 2353  
Db 1962 AKGEVWKNSNEFTVKNA-----;  
Qy 506 -GNYKFKIEFG-----;  
Db 2006 TGTEKTVENGKVVSANGSKTEVTLNKSGSYVGNQVADAIAKSGFELGLADAAEK 2065 ;  
Qy 552 SVN-----;  
Db 2066 AFFAESAKOKOLSKDAETVNAHKVREANGLNTKVSATVVESTDANGDKVTTTEVKTDVE 2125 ;  
Qy 584 LQVLDQDILADVAANNTVVMQMTGTPEMFWLDTAPAVIQAWYGGNETN-STADVF 642 ;  
Db 2126 LP--LTOIYN--TDANGNKKVKKADG-----;  
Qy 643 GDYNPSGKSLSLSPPKRLQDNPFLNFTREACT--LYGEDVYVSYRYEFADKVNPF 699 ;  
Db 2166 GNYDANGKKVVKVTEGADKWWITNADGADTKGEVSNDKVSDEKHVRLLDP-N-NO\$N 2224 ;  
Qy 700 GHGLSYT'FAFSNLVSYSHDKSLVSLSVKATGSGVPAOAQOLYVKPLAAKIRPVKE 759 ;  
Db 2225 GKVWIDNA-----;  
Qy 760 KG 761 ;  
Db 2269 EG 2270 ;

RESULT 14  
 US-09-869-877-6  
 Sequence 6, Application US/9869877  
 Publication No. US20020192792A1  
 GENERAL INFORMATION:  
 APPLICANT: Schneider, Palle  
 APPLICANT: Danielsen, Steffen  
 APPLICANT: Svendsen, Allan  
 TITLE OF INVENTION: Laccase Mutants  
 FILE REFERENCE: 10179-204-JS  
 CURRENT APPLICATION NUMBER: US/09/869-877  
 CURRENT FILING DATE: 2001-07-06  
 NUMBER OF SEQ ID NOS: 10  
 SOFTWARE: Patentin version 3.1  
 SEQ ID NO: 6  
 LENGTH: 599  
 TYPE: PRT  
 ; ORGANISM: Rhizoctonia solani  
 ; US-09-869-877-6  
 Query Match 2.7%; score 118.5; DB 9; Length 599;  
 Best Local Similarity 20.9%; pred. No. 0.36; Matches 122; Conservative 75; Mismatches 223; Indels 163; Gaps 29;  
 QY 257 FNVNSNGKPFHIVIDQRAREVILQFVKCAASGVTENGSPETTVNNTPTETALLRKVGNEGIV 316  
 Db 26 FDVANG-----AVAPDGVTN-----AVLVNGRFPGPL 53  
 QY 317 LLKNNNNVLPLSKKKKLIVLGNNAKQT--YHGGGSALRALRAYYAVTPFDGLSKOLETPP 373  
 Db 54 ITANKGDTLKTVRNK--LSDPTMRKTITHHMG---LHQHRTAEDGPAFTQCPPIP 107  
 QY 374 --SYTGVAYTVPPIGEQC-----LTDPGAPGMRWYFNEPCTPGRNQHOBELFFT 423  
 Db 108 QESYTY----TMP--LGEQTGTWYWHSHLSQYVDGLRGPTVYDHPDPRNYD-VDDE 160  
 QY 424 KTDMLHLVYVHKAAADTWYALMEGYTADDECTYELGLWVCGTAKAYVDDOLVWDNATQ 483  
 Db 161 RTVFTLADWYH-----TPSEALIATHDVLKTIPTDSCTINGKGY 199  
 QY 484 VPGDAFFGSAATREETGRINLYKGNTYKFKIEFGSAPTYTLKDTIVPGHSLRVGGCKVI 543  
 Db 200 DPASANNTNTILENLTYLKVKGKRYRLRINASATASFRG--VQGH----KCTII 250  
 QY 544 DDQAETEKSVALAKERHDQVICAG----LNADWETEGADRASMKLPGVLDQLADVA 597  
 Db 251 EADGVLTKPI---EVDAFDILAGQRYSCLIKAD--QDPDSYWINAP----ITNVLN 297  
 QY 598 ANPNTVYVMQG-TPEEMPW----LDAVPAVQAW----YGGNETG-----634  
 Db 298 TNQVALLYEDDKRTPHWPKFELTWKISNEIYOQWOKHGSHGHKGKGHHKVRAIGV 357  
 QY 635 NSIADWFGDNPNGSKLUSLSPKRLQDNPAFLNFR-TEAGTLYGEDVV-----683  
 Db 358 SGSSRSVKSASDLSKKAVELAALVAGEAEELDKRONEEDNSTIVLDETKLIPVQPGAPG 417  
 QY 684 GYRYYEFAKDQVNFPRGHGLSYY--FAFSNLVSVKD-----GKLSVS--LSV 728  
 Db 418 GSR----PAVWVPLDFGLNFANGLINTNNVSYSPDPVPLKILTDKDVDASETAD 472  
 QY 729 KNTGSVPGQAQOLYVVKPLQAKINRVEKLGKFAKVELQGE 771  
 Db 473 EHTYILPKNQVELHKG-QALGIVHPL-LHGHAFDVWQFGD 513  
 RESULT 15  
 US-09-732-350-6  
 Sequence 6, Application US/09732350  
 ; Sequence 6, Application US/09732350  
 ; Patent No. US20010031490A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Svendsen, Allan  
 ; APPLICANT: Svendsen, Allan  
 ; APP ICN: Y  
 ; STATE: NY  
 ; COUNTRY: USA  
 ; ZIP: 10174  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Diskette  
 COMPUTER: IBM Compatible  
 OPERATING SYSTEM: DOS  
 SOFTWARE: FastSEQ for Windows Version 2.0  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/09/732,350  
 FILING DATE:  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 09/032, 315  
 FILING DATE:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Rozek, Carol  
 REGISTRATION NUMBER: 36, 993  
 REFERENCE DOCKET NUMBER: 5200.200-US  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 212-878-6555  
 INFORMATION FOR SEQ ID NO: 6:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 599 amino acids  
 TYPE: amino acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 ; US-09-732-350-6  
 Query Match 2.7%; score 118.5; DB 10; Length 599;  
 Best Local Similarity 20.9%; Pred. No. 0.36; Matches 122; Conservative 75; Mismatches 223; Indels 163; Gaps 29;  
 QY 257 FNVNSNGKPFHIVIDQRAREVILQFVKCAASGVTENGSPETTVNNTPTETALLRKVGNEGIV 316  
 Db 26 FDVANG-----AVAPDGVTN-----AVLVNGRFPGPL 53  
 QY 317 LLKNNNNVLPLSKKKKLIVLGNNAKQT--YHGGGSALRALRAYYAVTPFDGLSKOLETPP 373  
 Db 54 ITANKGDTLKTVRNK--LSDPTMRKTITHHMG---LHQHRTAEDGPAFTQCPPIP 107  
 QY 374 --SYTGVAYTVPPIGEQC-----LTDPGAPGMRWYFNEPCTPGRNQHOBELFFT 423  
 Db 108 QESYTY----TMP--LGEQTGTWYWHSHLSQYVDGLRGPTVYDHPDPRNYD-VDDE 160  
 QY 424 KTDMLHLVYVHKAAADTWYALMEGYTADDECTYELGLWVCGTAKAYVDDOLVWDNATQ 483  
 Db 161 RTVFTLADWYH-----TPSEALIATHDVLKTIPTDSCTINGKGY 199  
 QY 484 VPGDAFFGSAATREETGRINLYKGNTYKFKIEFGSAPTYTLKDTIVPGHSLRVGGCKVI 543  
 Db 200 DPASANNTNTILENLTYLKVKGKRYRLRINASATASFRG--VQGH----KCTII 250  
 QY 544 DDQAETEKSVALAKERHDQVICAG----LNADWETEGADRASMKLPGVLDQLADVA 597  
 Db 251 EADGVLTKPI---EVDAFDILAGQRYSCLIKAD--QDPDSYWINAP----ITNVLN 297  
 QY 598 ANPNTVYVMQG-TPEEMPW----LDAVPAVQAW----YGGNETG-----634  
 Db 298 TNQVALLYEDDKRTPHWPKFELTWKISNEIYOQWOKHGSHGHKGKGHHKVRAIGV 357  
 QY 635 NSIADWFGDNPNGSKLUSLSPKRLQDNPAFLNFR-TEAGTLYGEDVV-----683  
 Db 358 SGSSRSVKSASDLSKKAVELAALVAGEAEELDKRONEEDNSTIVLDETKLIPVQPGAPG 417  
 QY 684 GYRYYEFAKDQVNFPRGHGLSYY--FAFSNLVSVKD-----GKLSVS--LSV 728  
 Db 418 GSR----PAVWVPLDFGLNFANGLINTNNVSYSPDPVPLKILTDKDVDASETAD 472  
 QY 729 KNTGSVPGQAQOLYVVKPLQAKINRVEKLGKFAKVELQGE 771  
 Db 473 EHTYILPKNQVELHKG-QALGIVHPL-LHGHAFDVWQFGD 513  
 RESULT 15  
 US-09-732-350-6  
 Sequence 6, Application US/09732350  
 ; Sequence 6, Application US/09732350  
 ; Patent No. US20010031490A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Svendsen, Allan  
 ; APPLICANT: Svendsen, Allan  
 ; APP ICN: Y  
 ; STATE: NY  
 ; COUNTRY: USA  
 ; ZIP: 10174  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Diskette  
 COMPUTER: IBM Compatible  
 OPERATING SYSTEM: DOS  
 SOFTWARE: FastSEQ for Windows Version 2.0  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/09/732,350  
 FILING DATE:  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 09/032, 315  
 FILING DATE:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Rozek, Carol  
 REGISTRATION NUMBER: 36, 993  
 REFERENCE DOCKET NUMBER: 5200.200-US  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 212-878-6555  
 INFORMATION FOR SEQ ID NO: 6:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 599 amino acids  
 TYPE: amino acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 ; US-09-732-350-6  
 Query Match 2.7%; score 118.5; DB 10; Length 599;  
 Best Local Similarity 20.9%; Pred. No. 0.36; Matches 122; Conservative 75; Mismatches 223; Indels 163; Gaps 29;  
 QY 257 FNVNSNGKPFHIVIDQRAREVILQFVKCAASGVTENGSPETTVNNTPTETALLRKVGNEGIV 316  
 Db 26 FDVANG-----AVAPDGVTN-----AVLVNGRFPGPL 53  
 QY 317 LLKNNNNVLPLSKKKKLIVLGNNAKQT--YHGGGSALRALRAYYAVTPFDGLSKOLETPP 373  
 Db 54 ITANKGDTLKTVRNK--LSDPTMRKTITHHMG---LHQHRTAEDGPAFTQCPPIP 107  
 QY 374 --SYTGVAYTVPPIGEQC-----LTDPGAPGMRWYFNEPCTPGRNQHOBELFFT 423  
 Db 108 QESYTY----TMP--LGEQTGTWYWHSHLSQYVDGLRGPTVYDHPDPRNYD-VDDE 160  
 QY 424 KTDMLHLVYVHKAAADTWYALMEGYTADDECTYELGLWVCGTAKAYVDDOLVWDNATQ 483  
 Db 161 RTVFTLADWYH-----TPSEALIATHDVLKTIPTDSCTINGKGY 199  
 QY 484 VPGDAFFGSAATREETGRINLYKGNTYKFKIEFGSAPTYTLKDTIVPGHSLRVGGCKVI 543  
 Db 200 DPASANNTNTILENLTYLKVKGKRYRLRINASATASFRG--VQGH----KCTII 250  
 QY 544 DDQAETEKSVALAKERHDQVICAG----LNADWETEGADRASMKLPGVLDQLADVA 597  
 Db 251 EADGVLTKPI---EVDAFDILAGQRYSCLIKAD--QDPDSYWINAP----ITNVLN 297  
 QY 598 ANPNTVYVMQG-TPEEMPW----LDAVPAVQAW----YGGNETG-----634  
 Db 298 TNQVALLYEDDKRTPHWPKFELTWKISNEIYOQWOKHGSHGHKGKGHHKVRAIGV 357  
 QY 635 NSIADWFGDNPNGSKLUSLSPKRLQDNPAFLNFR-TEAGTLYGEDVV-----683  
 Db 358 SGSSRSVKSASDLSKKAVELAALVAGEAEELDKRONEEDNSTIVLDETKLIPVQPGAPG 417

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QY 684 GRYVEEADKQVNFPFGHLSYT - FAFSNLSVSHKD-----GKLVS - LSV 728  
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DB 418 GSR----PADVVVPLDFGLNFANGLWTINNSVSPPDVPTLKLITDKDVKVADSETAD 472  
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QY 729 KNTGSVPGAQYKPLQAKINRPVKEKKVVELQPG 771  
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DB 473 EHTYLUPKNQVELHKG-QRLGIVHPL-HIGHAFDWQFGD 513  
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Search completed: April 26, 2003, 13:07:00  
Job time : 37 secs